**AccountingGPT MVP Specification Document**

**Objective**

Build a Minimum Viable Product (MVP) for AccountingGPT aimed at accounting firms to streamline core tasks, improve automation, and enhance client interactions.

**Overall Tech Stack**

**Frontend**:

* React.js
* TailwindCSS
* Chart.js / D3.js

**Backend**:

* Python (FastAPI)
* Node.js (optional for specific integrations)
* PostgreSQL

**Machine Learning & AI**:

* Scikit-learn
* Facebook Prophet
* Pandas / NumPy
* Tesseract / AWS Textract (OCR)

**Authentication & Authorization**:

* Firebase Auth / Auth0

**Third-Party APIs**:

* Plaid (Bank feeds)
* QuickBooks Online API
* Twilio (SMS notifications)
* SendGrid (Emails)

**Infrastructure**:

* AWS / GCP / Azure
* Docker
* Redis + Celery (for background tasks)
* S3 (Document Storage)

**DevOps**:

* GitHub Actions / GitLab CI
* Terraform / CloudFormation (optional)

**MVP Features Selected**

* Bookkeeping automation
* Financial statement generation
* Predictive analytics
* OCR-based data entry
* Client portal
* Role-based access
* Basic bank/QuickBooks API integrations
* Automated client notifications

**Remaining Features (Post-MVP)**

These are deferred to the post-MVP roadmap:

1. Multi-Currency Support
2. Payroll Processing
3. Accounts Payable & Receivable
4. Fraud Detection & Anomaly Alerts
5. Smart Expense Management
6. Custom Reporting & Dashboards
7. Audit Trail & Activity Logs
8. Advanced Compliance Modules
9. E-commerce & POS Integration
10. Document Management & E-signatures
11. Time Tracking & Billing
12. Branded/White-labeled Portals
13. AI Training Modules & Support Bot

| **Feature** | **Estimated Timeline** | **Primary Tech Stack / Tools** | **Expertise Required** |
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| **Bookkeeping Automation** | Week 3–4 | Python, FastAPI, PostgreSQL, Plaid API | Backend Dev, ML Engineer, Integrations Engineer |
| **Financial Statement Generation** | Week 5–6 | Python, PostgreSQL, React.js, Chart.js | Backend & Frontend Dev |
| **Predictive Analytics** | Week 5–6 | Pandas, NumPy, D3.js / Chart.js | ML Engineer, Backend Dev |
| **Client Portal** | Week 3–5 | React.js, TailwindCSS, Firebase Auth / Auth0 | Frontend Dev, Auth Specialist |
| **OCR-Based Data Entry** | Week 3–6 | Tesseract / AWS Textract, Python, FastAPI | ML Engineer (OCR), Backend Dev |
| **Automated Client Reminders** | Week 6–7 | FastAPI, Celery, Twilio, SendGrid | Backend Dev, DevOps |
| **Role-Based Access Control** | Week 5–6 | Firebase/Auth0, FastAPI, PostgreSQL | Backend Dev, Auth Specialist |
| **API Integrations (Bank, QBO)** | Week 4–7 | Plaid API, QuickBooks API, FastAPI | Backend Dev, Integrations Engineer |
| **Authentication & Authorization** | Week 1–2 | Firebase/Auth0 | Backend Dev, Auth Specialist |
| **Infrastructure & DevOps Setup** | Week 1–2 | AWS/GCP, Docker, GitHub Actions, Redis, PostgreSQL, S3 | DevOps Engineer |
| **UI/UX Design** | Week 1–2 (and ongoing) | Figma (or similar), TailwindCSS | Product Designer |
| **Testing & QA** | Week 7–8 | Postman, PyTest, Cypress (for frontend), Manual QA | QA Engineer |
| **Staging & Deployment** | Week 8 | Docker, GitHub Actions, AWS/GCP | DevOps Engineer |